Understanding Dynamic Flow Control

- Dynamic Flow Control is the *essential* feature of Shader Model 3.0 (and 4.0) & GLSL
- Ability to loop or branch within a pixel shader
  - Branch comes from temporary register
  - Loop iteration comes from integer constant
- Dynamic vs static branching
  - Different beasts, leading to different results
- DFC enables a different code path to be executed
  - Allows more intuitive shader writing
  - E.g. two-sided lighting, LOD-based branching, etc.
- DFC allows skipping of instructions
  - This is where the performance savings are!
  - But there are conditions...